

## REMARKS

Claims 1-9 and 11-28 have been rejected under 35 USC 103(a) as being obvious over Bauer (US 4,881,723) in view of Imaizumi (US 4,503,951). Bauer (US 4,881,723) discloses a double-damped gas spring with friction liner and sealing ring for use in gas spring applications such as holding open the lid of a sun-tanning booth. Imaizumi (US 4,503,951) discloses a hydraulic damper having variable damping using a hydraulic liquid such as oil. The gas spring of Bauer (US 4,881,723) is designed to provide a biased one-way direction as compared with a two-way device that operates similarly in both the up stroke and the down stroke. The Office Action of Record has stated that “Bauer provides a valve system that releases air pressure from the upper chamber when the piston moves on the up stroke, but lacks a valve system that totally releases the pressure from the lower chamber on the down stroke.” The Office Action of Record then states that “Imaizumi teaches a valve arrangement wherein said movable valve system releases an air pressure from said upper variable volume chamber when said piston changes from said up stroke first direction to said opposite down stroke direction and releases an air pressure from said lower variable volume chamber when said piston changes from said down stroke direction to said up stroke direction.” The Office Action of Record then concludes this rejection of the claims by stating “It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the damper of Bauer et al with a valve arrangement as taught by Imaizumi merely to provide significant damping in both the upstroke and down stroke.” (underlines added for emphasis)

Applicants respectfully contend that this combination is improper and flawed, in that such a combination of Bauer and Imaizumi is not obvious and that the above quoted statements of the Office Action of Record are flawed. Imaizumi does not teach a valve arrangement with a movable valve system that releases air pressure in that Imaizumi discloses a hydraulic damper, not a pneumatic damper. The movable valve system of Imaizumi, such as shown in Fig. 3-8 controls the liquid flow rate of the

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noncompressible hydraulic liquid oil between the liquid chambers B and C. The only gas chamber disclosed in Imaizumi is gas chamber A, which has no valve system. The gas chamber A of Imaizumi is a sealed gas chamber which “contains therein a gas such as air or nitrogen gas under pressure” (Imaizumi column 2, lines 10-11) with this gas chamber A having no movable valve system or connection with a valve. The obviousness rejections have been made on the above quoted basis that Imaizumi teaches a movable valve system that releases air pressure from the upper variable volume chamber and releases air pressure from the lower variable volume chamber, which clearly is untrue, thus these obviousness rejections relying on Imaizumi must be withdrawn.

In addition to the above noted fact that the combination is improper and flawed, Applicants further contend that the combination is not proper in that it tries to combine two totally different systems with Bauer’s sun tanning booth gas spring variable volume working chambers utilizing a compressible fluid (gas) and Imaizumi’s hydraulic damper variable volume working chambers utilizing a noncompressible hydraulic fluid (liquid). In that these two systems (compressible gas vs. noncompressible liquid) are different by their very nature of operation, there is no motivation to combine Bauer with Imaizumi as proposed in the Office Action of Record. Clearly it is not obvious to one skilled in the art to provide the gas spring of Bauer with a liquid flow valve arrangement of Imaizumi.

In that the rejection of all of the claims (Claims 1-28) has been based on this combination of Bauer with Imaizumi, Applicants respectfully request a Notice of Allowance.

Additionally as noted by the attached listing of the claims, Applicants have cancelled dependent claim 2 and amended claim 1 to distinctly claim the air piston which includes the constant volume accumulator gas chamber 54 with the movable valve system controlling the accumulation of the compressed air in the chamber 54. Neither Bauer and Imaizumi separately or combined teach the use of such a constant volume accumulator gas chamber in a piston with a movable valve system that provides for

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the accumulation of compressed gas that is forced out of the reducing volume variable volume chamber.

Claim 10 has been rejected under 35 USC 103(a) as being obvious over Bauer (US 4,881,723) in view of Imaizumi (US 4,503,951) and further in view of Bell (US 6,725,983). As argued above the combination of Bauer (US 4,881,723) in view of Imaizumi (US 4,503,951) is improper and does not render the claims obvious, and the addition of Bell (US 6,725,983) to this proposed combination does not make up for the deficiencies and imperfection of the Bauer and Imaizumi combination.

The pending claims are not rendered obvious by the proposed combination of references thus Applicants respectfully request allowance of the claims.

In view that the Office Action of Record is final, Applicants include herewith an RCE filing, and the Applicants hereby respectfully request an opportunity for an interview with the Examiner in the event that a Notice of Allowance is not granted.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Ed Murphy', with a long, sweeping horizontal line extending to the right.

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